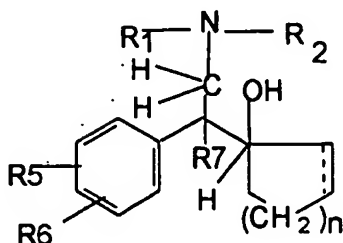


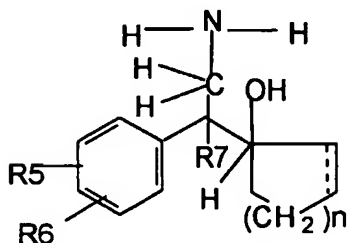
CLAIM:

1. A process for the preparation of hydroxy (cycloalkane/cyclokene) phenylethyl amine of the general formula (III)

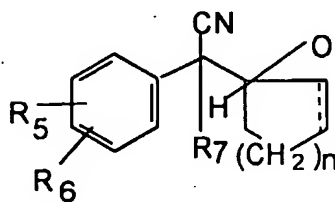


Formula III

comprising alkylation of its precursor amine of general formula (II) which is in turn produced by an effective reduction process from its precursor cyanide having the general formula (I)



Formula II

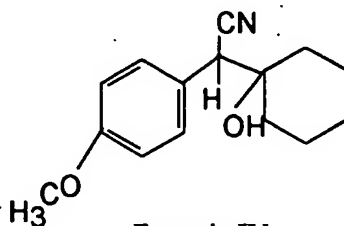


Formula I

where, either of R5 and R6 independently could be in meta or para position and R5, R6 are independently hydrogen, hydroxyl, alkyl, alkoxy, alkanoyloxy, cyano, nitro, alkylmercapto, amino, alkylamino, alkanamido, halo, trifluoromethyl, or taken together methylenedioxy, n is 0,1,2,3,4; R7 is hydrogen or alkyl of 1-7 carbon atom, R1 is H or alkyl of 1-3 carbon atom and R2 is alkyl of 1-3 carbon atom, the dotted line represents optional unsaturation.

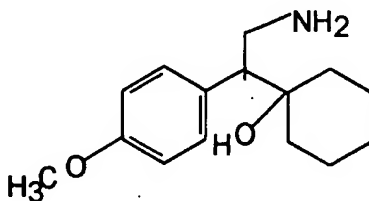
2. A process as claimed in claim 1 wherein, in formula I, when either R5 or R6 is in para position and either one of them is -OCH3 and the other is H, R7 is hydrogen; the dotted line

representing optional unsaturation is removed and $n = 2$ the compound is a compound of formula IV which is known as 1-[cyano-(p-methoxyphenyl)methyl]cyclohexanol.



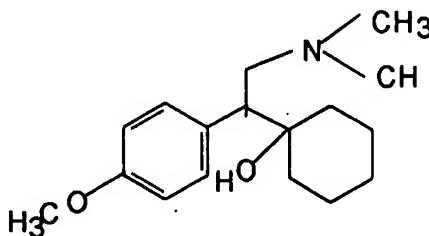
Formula IV

3. A process as claimed in claim 1 wherein, in formula II, when either R5 or R6 is in para position and either one of them is $-OCH_3$ and the other is H, R7 is hydrogen; the dotted line representing optional unsaturation is removed and $n = 2$ the compound is a compound of formula V which is 1-[2-amino-1-(p-methoxyphenyl)ethyl]cyclohexanol obtained by the process of reduction of compound of formula IV



Formula V

4. A process according to claim 1 wherein, in formula I, when either R5 or R6 is in para position and one of them is $-OCH_3$ and other one is H; R1 and R2 is $-CH_3$; R7 is H; $n=2$ and with optional unsaturation removed, the compound is venlafaxine of formula VI which is obtained by methylation of the compound of formula VI



Formula VI

5. A process as claimed in claim 1 or 3, wherein the reduction is carried out using Raney Ni (CORMIII) as catalyst.
- 5 6. A process as claimed in claim 5, wherein the reduction is carried out using a solvent media of aqueous ammonia and methanol.
7. A process as claimed in claim 5, wherein the reduction is carried out in the presence of the
10 combination of aqueous ammonia and methanol in the ratio of between 1:10 to 1:1.
8. A process as claimed in claim 7, wherein the ratio of aqueous ammonia to methanol is 1:5.
9. A process as claimed in claim 5, wherein the catalyst is used in the proportion of 100 to 20
15 wt. % of the compound of formula IV.
10. A process as claimed in claim 9, where the catalyst has been used most effectively at a concentration of 75% w/w of the compound of formula IV.
- 20 11. A process as claimed in claims 1 or 2, wherein the compound of formula IV has a concentration in the range of 2 to 20 w/v %.
12. A process as claimed in claim 12, wherein compound of formula IV has a concentration in the range of 7 to 13 w/v %.
- 25 13. A process as claimed in claim 12, wherein the compound of formula IV has a concentration of 6 w/v %.
14. A process as claimed in any one of the preceding claims wherein the catalyst is aged upto
30 120 days after its preparation and prior to its use.
15. A process as claimed in claim 14 wherein the catalyst is aged for a period of between 45 to 30 days after its preparation and before its use.

16. A process as claimed in claim 15, where the catalyst is aged for about 27 days after its preparation and before its use.
- 5 17. A process as claimed in any one of the preceding claims, wherein the reduction is carried out at -5 to 40°C.
18. A process as claimed in claim 17, wherein the reduction is carried out at 15 to 30°C.
- 10 19. A process as claimed in claim 18, wherein the reduction is carried out at 27°C.
20. A process as claimed in any one of claims 17 to 19, wherein the reduction is carried out for 24 hours.
- 15 21. A process as claimed in claim 20, wherein the reduction is carried out for a period of between 8 to 24 hours.
22. A process as claimed in claim 21 wherein the reduction is carried out upto 9 hours..
- 20 23. A process a claimed in claim 1 and 3 wherein the hydrogen pressure is maintained between 30 to 200 psi.
24. A process a claimed in claim 23, wherein the hydrogen pressure is maintained from 50 to 150 psi.
- 25 25. A process a claimed in claim 24, wherein the hydrogen pressure is maintained at 120 psi.
26. A process as claimed in any one of the preceding claims, wherein the methylation is carried out using conventional Eshweiler Clarke method.